DOCUMENT RESUME

ED 262 596 FL 015 262

AUTHOR Campoverde, Cecilia
TITLE Metacognitive Language in Bilingual Children.
PUB DATE 85
NOTE 15p.; Paper presented at the annual meeting of the American Educational Research Association (Chicago, IL, March 31-April 4, 1985).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Bilingual Education Programs; *Bilingual Students; *Cognitive Development; Comparative Analysis; *Concept Formation; Educational Strategies; English (Second Language); Language of Instruction; *Language Proficiency; Learning Processes; Limited English Speaking; *Metacognition; Spanish Speaking; Teaching Methods; *Underachievement

ABSTRACT

An exploratory study was conducted to identify the degree of language performance in native and bilingual English- and Spanish-speaking children under circumstances of native and bilingual language instruction. The study is a first step in testing the hypothesis that the underachievement of children in English-as-a-second-language programs and bilingual programs reflects an inadequate process of instruction. In those programs, the syntactical aspects of English is emphasized to the detriment of the children's conceptual development. Two hundred children, aged 9-12, in four groups (native English-speaking, native Spanish-speaking in Colombia, bilingual tested in English, and bilingual tested in Spanish) were administered a 33-item test based on a fable, and asked to interpret the story and answer questions. The results indicated that the native Spanish-speaking and native English-speaking children receiving instruction in their native countries performed significantly better than the bilingual groups receiving instruction in U.S. bilingual programs, and that all groups performed at much lower levels of abstraction than anticipated according to theory. The need for experimental research on the effects of instructional methods that use language as a mediating tool in conceptual development is suggested. (Author/MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED262596

METACOGNITIVE LANGUAGE IN BILINGUAL CHILDREN

Paper Presented by:

Cecilia Campoverde, Ph. D.
Associate Evaluator
Social Services Training Project
State University College at Buffalo

1985 AMERICAN EDUCATIONAL RESEARCH ASSOCIATION

ANNUAL MEETING

Held at Chicago, Illinois

on

March 31 - April 4, 1985

BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

cecilia Campoverde

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

FL015262

ABSTRACT

National statistics indicate that, limited-English speakers of Hispanic origin are well below academic norms. Reasons for such facts have been attributed to psychological impairments, social deprivation and limited English proficiency, among other factors. Little or no research has been done on the relationship between academic success and the type of instructional process provided to such children.

The author hypothesized that low academic success of such children reflects an inadequate process of instruction in the "ESL" and "Bilingual" programs, where, too often, the syntactical aspects of the English language rather than the total conceptual development in children is emphasized. It follows that children's cognitive development is delayed while their learning of English takes place.

As a primary step to test the above hypothesis, the author conducted an exploratory study for the purpose of identifying the degree of language performance in native and bilingual English and Spanish speaking children, under circumstances of native and bilingual language instruction.

A total of 200 students, from 9 to 12 years of age, in four groups of Native English, Native Spanish, Bilingual tested in English and Bilingual tested in Spanish were used. Following Vygotsky's three levels of language abstraction, and the concept of inference as understood in schemata theory, the author developed a 33 item test, based on a fable. Children were tested individuals, and were asked to "interpret" the story and to answer to the questions. All answers were recorded. Transcriptions were scored and later analyzed utilizing multivariate analyses.

The results indicate that Native English and Native Spanish children, who were receiving instruction in their own language and culture (U.S.A. and Colombia), performed significantly higher than the bilingual groups receiving instruction in U.S.A. bilingual programs. Although a significant difference was found between Native and Bilingual groups, it was also found that all groups performed at much lower levels of abstractions than expected, according to theory. Whereas the Native groups reached at least minimal acceptable levels of "Practice" abstraction, the bilingual groups achieved only minimal "Concrete" levels of abstraction.

The results also showed that although all children infer when probed, they minimally do so when asked to "interpret" the story. The author ventures some possible reasons for such behaviors, emphasizing the rather direct and concrete orientation of the instructional process in schools; an orientation that asks for concrete responses, leans heavily on recognition tasks, allows minimal time for creative expression, and which uses language to identify and recongize events rather than to reconstruct and order one's environment.

The findings of this exploratory study suggest the need for experimental research on the effects of instructional methods which utilize language as a mediating tool in the conceptual development process on the academic achievement of limited-English speakers.

BEST COPY AVAILABLE

THEORETICAL FRAMEWORK

Cummins J. (1977, 1980) suggests that Basic Interpersonal Communication Skills (BICS) are basic in successful language use. In 1982, he suggested that not only are BICS necessary but they are the key to acquire Cognitive Academic Language Skills (CALPS) necessary for school work. It is safe to assume that children who possess BICS and CALPS would perform well in school. Examples of BICS are all those phrases used to greet people, to find one's way to school, church, shopping mall, etc. ("How are you?", Where do you come from?") Examples of CALPS are all those words used to explain scientific concepts in school, to do mathematical problems, to answer tests, etc. ("What is the square root of 49?" "Explain the phenomenon of 'gravity'.")

The concept of language, as proposed by Cummins, seems to serve a pragmatic function. Other authors, Vygotsky (1960), Luria (1968), Freire (1978), while accepting the pragmatic function of language, view language as a means to construct and reconstruct one's own consciousness and one's own view of the world. This rather philosophical approach calls for Metacognition when using language; that is, knowing why, how, when, how come we use "this particular concept rather than another." The acquisition of metacognition in language, therefore, becomes the key for successful communication of one's thoughts and understanding of other people's ideas. The process of using metacognition in language, suggests this investigator, leads to the acquisition of what can be called Metacognitive Academic Language Skills (METACALPS). Using BICS a child may be able to ask his father to given him one dollar to buy an ice cream. Using CALPS that child uses the concept of "one dollar" to do some addition problems in school. However, only using METACALPS will that child ever ask how come an ice cream is so costly. Only METACALPS will help that child develop consciousness about her or his world.

The proponents of language in a metacognitive fashion suggest that it can only be acquired via structured instruction (Vygotsky, 1960, 1968). Such instruction must be given in one's own language, and within the framework of one's own culture. Metocognitive language must be "practiced"; if it is not, it may never be acquired (Vygotsky, 1978). The specific instruction to mediate the development of metacognitive language requires teaching the identification and evaluation of "causal relationships," which appears to be the key element in the evaluative process.

BEST COPY AVAILABLE

Children who enter Bilingual programs, programs which have as their purposes to teach English to Limited English Speaking children as quickly as possible so that the children can be mainstreamed, are made to spend a great amount of time in the learning of BICS and CALPS, mostly in English. Because the instruction is focused on the teaching of the linguistics aspects of English, the practice or even introduction to the development of METACALPS is rarely, if ever, done.

The relationship of instruction to the development of metacognitive skills (METACALPS) was the main interest to this investigator. As a first step to identify such relationship, an exploratory study was conducted to ascertain the degree of metacognitive language use in children in Bilingual programs. It is hoped that a future experimental study will look at the effect of instruction on language, as suggested by theory.

REVIEW OF THE LITERATURE

The studies of Cole and Bruner (1971), Cummins (1982), Ervin and Osgood (1958), Fishman (1978), Lambert (1972), Luria (1979), Shy (1974, 1982), and Tucker (1982) lead to the conclusion that the enhancement of the child's native language and spontaneous concepts, together with a supportive social environment, are required prior to either the learning of a second language or academic instruction via a second language. Relating concept formation, which is developed at school age, to the learning of a second language, Vygotsky (1962) provides the following extensive explanation.

> The influence of scientific concepts on the mental development of the child is analogous to the effect of learning a foreign language, a process which is conscious and deliberate from the start. In one's native language, the primitive aspects of speech are acquired before the more complex ones. The latter presupposes some awareness of phonetic, grammatical, and syntactic forms. With a foreign language, the higher forms develop before spontaneous, fluent speech ... The child's strong points in a foreign language are his weak points in his native language, and vice versa. In his own language, the child conjugates and declines correctly, but without realizing it. He cannot tell the gender, the case, or the tense of the word he is using. In a foreign language, he distinguishes between masculine and feminine gender and is conscious of grammatical forms from the beginning.

BEST COPY AVAILABLE

> Of phonetics, the same is true. Faultlessly articulating his native speech, the child is unconscious of the sound he pronounces, and in learning to spell he has great difficulty in dividing a word into its constitutents sounds. In a foreign language, he does this easily, and his writing does not lag behind his speech. It is the pronunciation, the "spontaneous phonetics," that he finds hard to master. Easy spontaneous speech with a quick and sure command of grammatical structures comes to him only as the crown achievement of long, arduous study.
>
> Success in learning a foreign language is contingent on a certain degree of maturity in the native language. The child can transfer to the new language the system of meaning he already possesses in his own. The reverse is also true-a foreign language facilitates mastering the higher forms of the native language. The child learns to see his language as one particular system among many, to view its phenomena under more general categories, and this leads to awareness of his linguistic operations. Geothe said with truth that 'he who knows no foreign language does not truly know his own.' (p. 109-110).

An extensive review of the literature of the influence of language in the learning process support the contemporary belief among educators and psycholinguists that academic and social factors, such as those occurring in school settings weigh more in the development of concept formation, and learning in general, that do genetic factors. A review of Vygotsky's dialectical theory of concept formation showed the importance of an appropriate instructional approach in the process of developing abstract concepts; it also provided guidelines for the identification of levels or stages for assessing language abstraction. Inferring, as a generalization process, was identified as abstraction by Vygotsky (1962) and by the psycholinguists of the 1970's.

The review of the literature outlined the schemata approach as a way to understand language processes in the acquisition of knowledge. Great emphasis is made on the person's need of prior knowledge as the basis for acquiring new knowledge. This translates, essentially to the need of culture-specific schemata or frame of reference for successful language performance.

Language performance is seen as the ability of the person to successfully coordinate her or his knowledge about the world with a set of both linguistic and cultural rules, in order to communicate meanings. A metaphor for a poor language performer can be that of a poor tennis player who, although quite familiar with the regulations of the game, cannot perform them successfully on the court.

BEST COPY AVAILABLE

Successful coordination in language performance appears to be essentially a problem-solving procedure which utilizes the inferring process for its solution. Within the oral modality of language, this inferring process varies according to the degree of existent schemata and the intuitively learned set of linguistic rules; but, no mater how small is that degree, inferring of general information type data takes place. This fact can be exemplified in the daily life actions of even illiterate persons. The same cannot be said for the reading or writing modalities of language where explicit linguistic skills are needed besides all others used in the oral language modality.

Most research on language processes has been done with adults and within the reading language modality, utilizing sentences and stories. The researchers in the latter part of the 1970's, especially Tierney, Bridge, and Cera (1978), Omanson, Warren and Trabasso (1978), Paris and Upton (1976), and Shuy (1982), have studied inferring processes in children, utilizing both reading and oral language modalities, separately. Their main interest has been to find the degree of inferential processing that children are capable of making with and without probing. It has been found that children, as adults, when given the appropriate materials and circumstances to do so, can indeed infer Information level inferences. These findings support Vygotsky's suggestions that "instruction" or academic teaching should be ahead of physical development, that is, we must take the child one step ahead of what he or she is now capable of doing and, with guided and careful questioning, facilitate for that child her or his creation or inferring of knowledge. The lack of this creative process gives as a result a lack of comprehension even though free recall of explicit text and decoding may be present, as found by Omanson et al, and Tierney.

The review of studies on inferential processes and concept formation in general ascertain a variety of inferential processes that can be distinguished, depending on the age of the child, level of education, context, culture, etc. The literature does not reveal any studies of interconnection of concept formation levels and inferring types. The present investigation attempts to embed levels of concept formation (Vygotsky, 1962) within each of the three types of inferences suggested by Warren, Nicholas and Trabasso (1979).

This investigator suggests that each type of inference, "Information," "Causal," and "Evaluative," can be drawn at different levels of abstraction in the process of concept formation; that is, at the Concrete, Practice, or at the True-concept formation stage. Inferences drawn with the first level of abstraction limit the interpretation to that information which has been read or heard. Answers to inferential questions at this levell may even be given utilizing textual words. An example from "The Stone Soup" (the story utilized in this study), may clarify this concept. The first part of the story says:

> A poor man came to a large house during a storm to beg for food. He was sent away with angry words, but he went back and asked, "May I at least dry my clothes by the fire, because I am wet from the rain?" The maid thought this would not cost anything, so she let him come it.

From this part of the story we may ask an Information inference as follows: What did the man do to get into the house? Two responses at the Concrete level may be: (1) he asked if he could at least dry his clothes by the fire, because he was wet from the rain, or (2) he begged for food. The respondent knows the referent pronouns and changes the appropriate words in order to make an acceptable sentence structure. In essence, however, the responses are actual retellings of the text.

A higher stage of concept formations, according to Vygotsky (1962, 1978), is that of Practice. In this stage the child attempts to formulate a true abstraction but, supports herself or himself with information about which she or he feels secured about. It is a stage in which a child takes a risk at abstracting but plays it safe by stating that which she or he knows for sure. For example, in answering the question, "What did the man do to get into the house?", a child at the stage of Practice, may respond: "He invented a lie; he said to the made to let him come in to, at least, dry his clothes by the fire because he was wet from the rain." In this answer, we can see that the child knows the subterfuge used by the man to get into the house; however, the child repeats many textual words.

In the highest level of abstraction stage, that of True-abstraction, the child expresses the abstraction without the need for explanation. In answering the question posed before, the child could say: "He lied," He tricked the maid into feeling sorry for him," He played on the maid's naivete," He used a subterfuge," He changed strategies," "He made up an excuse," etc. In order to conclude these evaluative thoughts, the child must have seen the causal connections or reasons - hidden in the text. The child also brings cultural knowledge about the behavior of persons in certain roles and links them to formulate a judgement.

The importance of language in the process of development of a child, both from the personal and from the review of the literature are, in the opinion of this investigator, axiomatic. Language helps one in the restructuring of one's own thinking and it is the mediating factor in the process of learning. The process of formal instruction, which utilizes language as a tool for the expansion of knowledge, has been indicated as a prerequisite for the development of higher intellectual processes (Feldman, 1982; Luria, 1976, 1979; Vygotsky, 1962, 1978). Therefore, the assessment of language performance becomes paramount.

BEST COPY AVAILABLE

Recently, Shuy (1982), Cummins (1980, 1982), Tucker (1982) and Campoverde (1982, 1984), openly questioned the validity of assessing language proficienty through linguistic and isolated samples of language. They have advanced the proposition that, since language is primarily for communication purposes, assessment should aim at identifying the degree of "functional" language a person demonstrates. Shuy (1974, 1982) referring to language "Pragmatics" suggests that the nuances, subtleties and implication aspects of language are all intertwined in pragmatics. Given a specific situation, the utterance "It is hot here" will lead someone to open a window, a door, or any other opening that will allow some air into the specific room. Shuy also proposes assessment of functional language, that is, language used in specific circumstances; for example, suggests Shuy, assessment should be made of the way the child follows directions, delivers a message, answers a phone call, or addresses people at different levels or positions of employment (1982).

Similar to Shuy's suggestions, Cummins (1982) suggests that concern for assessment should be, not as much in what he calls Basic Interpersonal Communication Skills (BICS) but in the Cognitive-Academic Language Skills (CALPS). In essence, the assessment of language performance must look into how the person utilizes all linguistic factors and makes them serve a purpose in language: meaningful and scientific communication.

Furthering Shuy's and Cummin's suggestions, this investigator proposes that another purpose of languge, besides communication, is to mediate one's awareness of one's role within this world and to continuously restructure one's mind. In order for language to mediate this process, this investigator suggests, more than basic interpersonal (BICS), and cognitive (CALPS) skills are necessary; Metacognitive Language Skills (METACALPS) are imperative. METACALPS allows persons to know how do they process the language they use, and why do they choose the alternative they do; it allows the person to consciously create their own language rather than habitually make use of it.

The experience of this investigator reveals that children and illiterates can successfully "function" in the world with BICS-type langauge. It is also true that too many children possess efficient CALPS language that enables them to successfully complete tests and graduate college with satisfactory grades. It is however when going beyond the cognitive scientific information and into the evaluative-connective type of judgement when difficulty arises. Inability to perform at this level (metacognitively), suggests this investigator, makes people simple knowers of information rather than makers and evaluators of it. Without METACALPS children answer complex algebraic questions which demonstrate their cognitive abilities; however, this does not assure their understanding of the principles involved. METACALPS involve the child in challenging the veracity of what is heard or said, it makes the child an active participant in the creation of knowledge rather than a simple recipient of what has been done for him or her.

BEST COPY AVAILABLE

METACALPS enables people to connect informations and to consciously select alternative behaviors. This suggests the investigator, is the essence of education; and language mediates that process. Therefore, it is not sufficient to facilitate BICS and CALPS (these are essential to the building of METACALPS), but to go further and facilitate the reasoning, abstraction, and restructuring of the thinking process, that is, to facilitate METACALPS. It is not enough to know how to say "four" and "five" and to know how much is "four time five", and to use the lexicon. It is important to know how come "five times four" is "twenty" when using the base of ten, and how come we use the base of ten for everyday computations. It is important to know what is an "inch;" it is more important to know how come we use "inches" rather than "centimeters" in our business world and what is the impact of such use in our society.

The essential characteristic in the suggested facilitation of METACALPS rests on the conscious awareness of the usage of language. Where as all persons, in one way or another, utilize inferences in their communications, using METACALPS does it intentionally. The person is always aware of their choice of language behavior; the person becomes the master of the language rather than the simple user of it. The person becomes a critical thinker rather than a simple knower of scientific information.

In order to achieve a satisfactory METACALP level, instruction in language usage becomes paramount. As a first step to investigating the link between appropriate instructional process and academic achievement, this investigator attempted to identify the nature of language abstraction and the level of language abstraction performed by students in various groups. In later investigations the relationship between academic success and language abstraction will be sought. For the purpose of this first explorative study, the investigator asked what was the relationship between cultural group membership and language abstraction, and also what was the nature of language abstraction.

METHOD

It was hypothesized that Native speakers of English and Spanish who were being instructed in their own culture and language will demonstrate higher levels of inferring than will Bilingual speakers (who were instructed in English in the U.S.A. culture), whether they were tested in English or in Spanish. Higher levels of language abstraction performance would be domonstrated by Native speakers in both conditions, when freely expressing and "interpretation" of a fable, and when responding to "probing" questions about the fable. It was also hypothesized that there would be a relationship between Interpretation and Probing abstract language performance in all four groups.

BEST COPY AVAILABLE

Four groups of 50 students each were used: Native speakers of English, Native speakers of Spanish, Bilinguals tested in English, and Bilinguals tested in Spanish. Based on the content analysis performed by Adams and Collins (1978) on the Stone Soup fable, the investigator developed and validated a 33-item inferential test. Each of the three inference categories in the test -- Information, Causal, and Evaluative -- (Warren et al, 1979) were scored according to three levels of abstraction -- Concrete, Practice and True-abstraction -- (Vygtosky, 1962). The instructions and fable were taped and were administered individually to each of the 200 children. The children were asked to listen to the fable, provide an oral "interpretation" of it, and were then asked to answer the 33-items. All answers were taped and later transcribed.

In order to identify if there were any differences between Native and Bilingual groups, two disciminant analyses were done: One for the "Interpretation" and one for the "Probing" portions of the test. Significant discriminant functions were followed by multiple comparisons to identify the nature of the differences. The results of these analyses support hypotheses one and two: significant and meaningful differences between Native and Bilingual groups exist, both during Interpretation and during Probing. The analyses of the nature of the differences indicated that while during Interpretation, Information inferences appear to be more important during probing, causal inferring appears to be more important. In general, the analyses showed that the level of language abstraction performed by all children in this study was Concrete, with only the Native speakers reaching the Practice levels of abstraction, as expected by theory. The results also indicate that whereas Native as well as Bilingual speakers did not freely interpret the story, both groups were able to do so when probed, although the Bilinguals performed at the most Concrete level. Finally, and in order to test hypothesis three, which stated a relationship in the level of language abstraction performance during interpretation and during Probing, four canonical correlation analyses were performed. A significant correlation was found in the two Bilingual groups but no correlation was found in the Native groups.

DISCUSSION

The Native groups higher scores on all inference categories, in both portions of the test, and the apparent higher levels of abstraction within each inference category suggests an overall higher level of language performance over the Bilinguals. Similarity in the language performance of the two Bilingual groups suggests that their overall low language performance level may not have to do with having been tested in English or in Spanish (students were randomly assigned to be tested in English or in Spanish), but perhaps, it has to do with a lack of conceptualization in general. This, the investigator suggests, may have to do with the instructional process given in many Bilingual programs, which emphasizes the learning of linguistic skills rather than the enhancement of conceptualizations.

BEST COPY AVAILABLE

The average age of the children in this study was eleven, and most had been in Bilingual programs for a period of 19 to 27 months. That is, most of these students entered the Bilingual program at approximately the age of nine. Vygotsky (1962, 1978) suggests that this is a critical age in which children start to practice true-abstractions by venturing to abstract on concepts that they are not sure about, but that, unless they do, true-abstractions development may not take place. This investigator suggests that the children in the Bilingual program in this study may have not been given ample opportunities to practice true-abstractions in their own language--in this case, Spanish--and their process of development of abstraction was somewhat delayed. Not having the opportunity to develop language abstraction in their native nor in the second language, Bilingual children appear not to satisfactorily perform in either language, Spanish or English.

The research indicated that children, as well as adults, infer much less when freely expressing an interpretation of a story than when answering questions about it. These findings were corroborated by the results of this study, although in the case of the Bilingual groups, the performance remained at the very Concrete level of abstraction.

The results appear to conform with the theoretical view that cognitive process of development of abstraction are possible only within the schemata known to the students within a culture and language (Kintch & Greene, 1978; Shuy, 1978; Warren et al, 1979). The Bilinguals tested in Spanish were ablek to score higher than the Bilinguals tested in English, although both groups performed at the Concrete level of abstraction. Further research manipulating the instructional variable is necessary.

For all groups, the nature of the discrimination suggests that, during Interpretation, students employ more information inferences which are, according to Schemata theory, the most basic type inferences, based on general knowledge about the world. Students, for the most part, repeated the story rather than interpreted it. Statements of inference that denote knowledge as to where, and when the actions in the story took place, and who was or were the characters in the story were made by students; however, such evaluations were centralized rather than decentralized. That is, students, for the most part, based their evaluations and judgements strictly on their world knowledge and values rather than on their relationship to the context of the story. For example, some students said that "the made sent the man away because she didn't know him." This is an opinion which would be generally accepted in our culture. It is an inference since it was not told in the story. However, the maid, in her role as maid, sent the man away because she had orders from the owner of the house (general knowledge about the world) not to let anyone in, unless the owner knew the person. Rarely, during Interpretation did the students mention this more abstract type level of thinking in evaluating the maid's behavior.

BEST COPY AVAILABLE

Likewise, Causal inference was almost totally absent during Interpreation. Tierney (1978) suggests that the lack of Causal inferring denotes a lack of conceptual meaning rather than lack of linguisitc skills. This suggestion seems to be corroborated in this study. When students, during Probing were helped to "see" Causal relations, they performed Causal inferring; whereas the Native speakers performed, as expected, at the Practice level of abstraction, the Bilingual speakers performed Causal inferring at the very minimal Concrete level, suggesting perhaps, as espoused by Tierney, a lack of conceptualizations perhaps due to a lack of practice rather than a lack of linguistic skills.

As a whole, when answering to questions, students do not decentralize either, just as they did not while Interpreting the fable. That is, they answer in terms of themselves rather than in terms of the characters within the context of the story. However, during Probing, they were able, for example, to offer some opinions as to the "meaning" of the story. (Item 30). They also responded to Item 29 which questioned if the maid and the cook were faithful to the owner of the house, and to question 24 which asked what was the main responsibilities of the maid and the cook. Evaluative relations based on these items, which were almost completely ignored during Interpreation, were now verbalized, even if at the very low levels of abstraction. For example, in response to Item 24, some students replied that "the cook cooks and the maid cleans the house." This indeed is a Concrete inference, since it gives the most common knowledge we have about maids and cooks. A response such as "top protect the property of the owner of the house" or "not to let strangers into the house" may be considered a higher level of abstraction response within the context of the fable.

Further research is needed to scientifically ascertain the effect of instruction on children's concept development. As a first explorative study, the results presented here offer an opportunity for serious questioning. Do children who possess METACALPS in their native language learn a second language faster than children who do not? Can METACALPS be taught via a second language.

REFERENCES

Bruner, J.S. Going beyond the information given. In H. Gruber, et al., (Eds.), Contemporary approaches to cognition. Cambridge, Mass.: Harvard University Press, 1957.

Campoverde, Cecilia Language Performance - A Comparative Bilingual Study Doctoral Thesis, Hofstra University, 1982.

Campoverde, Cecilia Metacognitive Language Skills (METACALPS) A Suggested Instructional Approach. Paper presented at the fifth Annual Symposium for Research in Bilingual/Multicultural Education SUNY College at Buffalo, May 19, 1984.

Cummins, J. Cognitive factors associated with the attainment of intermediate levels of bilingual skills. Modern languages journal , 1977, 61 (1-2), 3-12.

Cummins, J. The entry and exit fallacy in bilingual education. NABE journal, 1980, 4, No.3.

Cummins, J. Language Assessment in bilingual education. Lecture presented at Seminar on Language Assessment, Hunter College, New York on April, 1982.

Ervin, S., & Osgood, J. The influence of language acquisition context in bilingualism. Journal of abnormal psychology, 1958, 56, 239-244.

Fishman, J.A. The sociology of language. Rowley, Mass.: Newburry House Publishers, 1972.

, (Ed.). Advances in the sociology of language. Paris: Mouton & Co., 1976.

, (Ed.). Advances in the creation and revision of writing systems. Paris: Mouton & Co., 1977.

, (Ed.). Advances in the study of societal multilingualism. Great Britain: Mouton & Co., 1978.

Freire, Paulo Education for Critical Consciousness. New York: Continuum, 1982.

Freire, Paulo Pedagogy in Process. New York: Continuum, 1983.

Lambert, W.E. (Ed.) Language, psychology, and culture. Stanford, California: Stanford Press, 1972. (a)

Lambert, W.E. Evaluational reactions to spoken languages. In W.E. Lambert (Ed.) Language, psychology and culture Stanford, California: Stanford Press, 1972. (b)

BEST COPY AVAILABLE

Luria, A.R. Cognitive development: its cultural and social foundations. Cambridge: Harvard University Press, 1976.

Luria, A.R. The making of mind. Cambridge: Harvard University Press, 1979.

Omanson, R.C., Warren, W.H. & Trabasso, T. Goals, inferential comprehension, and recall of stories by children. Discourse process journal, 1978, 1, No. 4, 337-354.

Shuy, R.W. Pragmatics: Still another contribution of linguistics to reading. Georgetown University and the Center for Applied Linguistics. Sixth Western Symposium on Learning. November 1974.

Tierney, R., Bridge, C., & Cera, M. The discourse processing operations of children. Reading research quarterly, 1978-1979, 4.

Trabasso, T. Representation, memory and reasoning: How do we make transitive inferences. In A.D. Pick (Ed.), Minnesota Symposium on Child Development, V. 9. Minneapolis: University of Minnesota Press, 1975.

Tucker, R. Language Assessment in Bilingual Education. Lecture presented at the Seminar on Language Assessment. Hunter College, New York, April 1982.

Vygotsky, L.S. Thought and Language New Haven: MIT Press, 1962.

Vygotsky, L.S. Mind in society Edited by M. Cole, V.J. Steiner, S. Scribner, & E. Souberman. Cambridge, Mass.: Harvard University Press, 1978.

Warren, W.H., Nicholas, D. W., & Trabasso, T. Events, chains, and inferences in understanding narratives. In R.O. Freedle (Ed.), New directions in discourse processing, V. 2. Norwood, N.J.: Ablex Publishing Corporation, 1979.

BEST COPY AVAILABLE